

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

CLAIMS:

1. (Currently Amended) An apparatus for guiding and driving a plank along a given path towards cutting tools for curve sawing the plank based on at least one parameter of the plank, the apparatus comprising:

evaluation means for evaluating the plank and generating a signal representing at least one parameter of the plank;

a frame;

a platform mounted on the frame and having a support surface for supporting the plank, the path along which the plank is to be guided and driven being defined on the support surface of the platform, said platform further comprising at least one support plate displaceable transversally in relation to the path, in response to the signal, via at least one actuator;

a first guide and drive mechanism mounted on the platform for receiving, guiding and driving the plank along a-the path on the support surface, the first mechanism comprising two first guide and drive elements arranged opposite relative to the path and being displaceable at an angle with respect to the path;

a second guide and drive mechanism mounted on the platform for guiding and driving the plank from the first mechanism along the path on the support surface up to the cutting tools, the second mechanism comprising two second guide and drive elements arranged opposite relative to the path and being substantially parallel to the path, ~~the guide and drive elements of the mechanisms located on a same side of the path being connected by a pivot axis;~~ and

displacing means for displacing the guide and drive elements from the ~~first and second~~ mechanisms in parallel and equidistant in relation to the path, in response to the signal, and for displacing the guide and drive elements from the first mechanism independently and at an angle with respect to the guide and drive elements from the second mechanism;

~~wherein the platform comprises at least one support plate in relation to the path, the guide and drive elements of the mechanisms located on a same side of the path being mounted on a corresponding support plate, the apparatus further comprising at least one actuator for displacing each support plate transversally in relation to the path in response to the signal;~~

~~wherein each of the guide and drive elements of the mechanisms comprises the guide and drive elements of the mechanisms located on a same side of the path are connected by a pivot axis, and are provided with an endless belt having an exterior contact surface for cooperating with the plank to be guided;~~

~~wherein at least one of the guide and drive elements of the second mechanism is mounted onto the at least one support plate so as to be displaceable transversally in relation to the path;~~

~~wherein the guide and drive elements from the first mechanism are displaceable independently and at an angle with respect to the guide and drive elements from the second mechanism; and~~

~~wherein the first and second guide and drive mechanisms each comprise means for independently exerting a pressure on the first and second onto their respective guide and drive elements on each side of the plank in response to the signal.~~

2. (Cancelled)

3. (Previously Presented) The apparatus according to claim 1, wherein each of the guide and drive elements of the mechanisms comprises toothed wheels for driving the endless belt, and wherein the exterior surface of the endless belt is covered with a toothed chain mat.

4. (Original) The apparatus according to claim 3, wherein the guide and drive elements of the mechanisms located on the same side of the path have a common toothed wheel which is able to turn about the pivot axis, the belts of the guide and drive elements of the mechanism located on the same side of the path together forming a single belt.

5. (Original) The apparatus according to claim 3, wherein each of the guide and drive elements of the mechanisms comprises a support wall facing the path and located between the intended wheels for supporting the belt.

6. (Original) The apparatus according to claim 1, wherein the displacing means comprises:

first and second pairs of jointed arms located on either side of the path, the arms of each pair being arranged in parallel, the arms of each pair being mounted between the support surface and the corresponding second guide and drive element; and

a mechanical connection linking the first and second pairs of jointed arms for coordinating a movement of the pairs of jointed arms in parallel and equidistant relative to the path.

7. (Original) The apparatus according to claim 6, wherein the mechanical connection comprises means for adjusting the length of the mechanical connection according to the distance between the support plates.

8. (Original) The apparatus according to claim 7, wherein the means for adjusting the length of the mechanical connection comprise an actuator mounted on the mechanical connection between the first and second pairs of jointed arms.

9. (Cancelled)

10. (Previously Presented) The apparatus according to claim 1, wherein the means for exerting a pressure on the first guide and drive elements comprise two actuators being mounted between the first guide and drive element and the second guide and drive element of a same side of the path.

11. (Previously Presented) The apparatus according to claim 1, wherein the means for exerting a pressure on the second guide and drive elements comprise two actuators being mounted between the support surface and the corresponding second guide and drive element.

12. (Previously Presented) The apparatus according to claim 1, wherein the means for exerting a pressure on the first guide and drive elements comprise two bellows being mounted between the first guide and drive element and the second guide and drive element of a same side of the path.

13. (Previously Presented) The apparatus according to claim 1, wherein the means for exerting a pressure on the second guide and drive elements comprise two bellows being mounted between the support surface and the corresponding second guide and drive element.

14. (Original) The apparatus according to claim 1, further comprising two trimming heads mounted on either side of the path.

15. (Original) The apparatus according to claim 1, further comprising detection means for detecting different positions of the plank in the apparatus, and activation means for activating the first and second guide and drive mechanisms as a function of the different positions of the plank.

16. (Original) The apparatus according to claim 15, wherein the detection means comprise photocells for detecting a displacement of the plank when said plank is received by the first guide and drive mechanism.

17. (Withdrawn) A method for guiding a plank towards cutting tools, comprising the following steps:

- a) evaluating the plank and generating a signal representing at least one parameter of the plank;
- b) receiving, guiding and driving the plank along a path by a first guide and drive mechanism, the first mechanism comprising two first guide and drive elements arranged opposite relative to the path;
- c) guiding and driving the plank by a second guide and drive mechanism from the first mechanism along the path up to the cutting tools, the second mechanism comprising two second guide and drive elements arranged opposite relative to the path and being substantially parallel to the path, the guide and drive elements of the mechanism located on the same side of the path being connected by a pivot axis; and
- d) displacing the guide and drive elements of the first and second mechanisms in a way that is parallel and equidistant in relation to the path in response to the signal.